



First Named

Inventor : Roger Lee Hipwell, Jr.

Appln. No. : 10/650,392

Filed : August 28, 2003

Title : IMPROVED MAGNETIC MICROACTUATOR FOR DISC
DRIVES WITH INTEGRATED HEAD CONNECTIONS AND
LIMITERS

Docket No. : I69.12-0576

Group Art Unit: 2834

Examiner:

INFORMATION DISCLOSURE STATEMENT

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I CERTIFY THAT THIS PAPER IS BEING SENT BY U.S. MAIL,
FIRST CLASS, TO THE ASSISTANT COMMISSIONER FOR
PATENTS, ALEXANDRIA, VA 22313, THIS 7th DAY OF
JANUARY, 2004.

Alana Briggs
PATENT ATTORNEY

Sir:

The enclosed PTO Form-1449 lists patents and publications submitted pursuant to 37 C.F.R. 1.97. Copies of the patents or publications are enclosed as necessary [if application filing date is after June 30, 2003, copies of U.S. patents and application publications are not required].

TIME OF FILING

The Information Disclosure Statement is being filed:

1. X with the application or within three months of the filing date of a national application (other than a continued prosecution application under 37 C.F.R. 1.53(d)) or date of entry into the national stage of an international application or, to the best of the undersigned's knowledge, before the mailing date of a first Office action on the merits or a first office action after the filing of a request for continued examination under 37 C.F.R. 1.114, whichever event occurs last. In accordance with 37 C.F.R. 1.97(b), no certification or fee is required.
2. after the time period specified in paragraph 1 above, but, to the best of the undersigned's knowledge, before the mailing date of a final action under 37 C.F.R. 1.113 or notice of allowance under 37 C.F.R. 1.311, or an action that otherwise closes prosecution of the application. In accordance with 37 C.F.R. 1.97(c), submitted herewith is:

(check either A or B below)

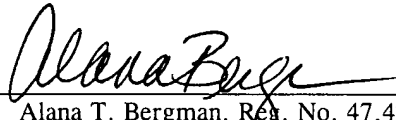
- A. a statement as specified in 37 C.F.R. 1.97(e), no fee is required.
- B. the fee set forth in 37 C.F.R. 1.17(p) for submission of an Information Disclosure Statement under 37 C.F.R. 1.97(c).

3. — after the mailing date of either a final action under 37 C.F.R. 1.113 or a Notice of Allowance under 37 C.F.R. 1.311, whichever occurs first, but on or before payment of the issue fee. Applicant petitions for consideration of this Information Disclosure Statement pursuant to 37 C.F.R. 1.97(d)(2). Applicant submits herewith:
- A. a statement as specified in 37 C.F.R. 1.97(e); and
 - B. the fee set forth in 37 C.F.R. 1.17(p).

Respectfully submitted,

KINNEY & LANGE, P.A.

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ATB:kmm

FORM PTO-1449

Atty. Docket No.:
169.12-0576Application No.:
10/650,392

JAN 09 2004

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION
DISCLOSURE STATEMENTFirst Named Inventor:
Roger Lee Hipwell, Jr.Filing Date:
August 28, 2003Group Art:
2834

U.S. PATENT DOCUMENTS

Examiner Initials	Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents
	5,189,578	02/23/93	Mori et al.
	5,276,573	01/04/1994	Harada, et al.
	5,303,105	04/12/94	Jorgenson
	5,364,742	11/15/94	Fan et al.
	5,375,033	12/20/94	MacDonald
	5,521,778	05/28/96	Boutaghou et al.
	5,629,918	05/13/1997	Ho, et al.
	5,638,267	06/10/97	Singhose et al.
	5,657,188	08/12/97	Jurgenson et al.
	5,711,063	01/27/1998	Budde, et al.
	5,745,319	04/28/98	Takekado et al.
	5,764,444	06/09/1998	Imamura, et al.
	5,781,381	07/14/1998	Koganezawa, et al.
	5,796,558	08/18/98	Hanrahan et al.
	5,801,472	09/01/98	Wada et al.
	5,805,375	09/08/98	Fan et al.
	5,808,384	09/15/1998	Tabat, et al.
	5,856,896	01/05/1999	Berg et al.
	5,863,024	01/26/1999	Blind, et al.
	5,867,347	02/02/1999	Knight, et al.
	5,883,759	03/16/1999	Schulz
	5,896,246	04/20/99	Budde et al.
	5,898,541	04/27/99	Boutaghou et al.
	5,898,544	04/27/1999	Krinke, et al.
	5,920,441	07/06/99	Cunningham et al.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.


 FORM PTO-1449

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Examiner Initials	Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents
	5,936,805	08/10/1999	Imaino
	5,945,898	08/31/1999	Judy, et al.
	5,959,808	09/28/1999	Fan, et al.
	6,043,957	03/28/2000	Hattori et al.
	6,064,550	05/16/2000	Koganezawa
	6,262,868	07/17/2001	Arya, et al.
	6,268,984	07/31/2001	Boutaghou
	US 6,396,667 B1	05/28/2002	Zhang, et al.
	6,414,822	07/02/2002	Crane, et al.
	6,414,823	07/02/2002	Crane, et al.

FOREIGN PATENT DOCUMENTS

Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Translation Yes No
JP 63-122069	05/26/1988	Konishi	Yes (abstract only)
EP 0 412 221 B1	11/28/1989	Birtzer	Yes
JP 02-263369	10/26/1990	Marutomo, et al.	Yes (abstract only)
JP 04-134681A	05/08/1992	Takaharu	Yes (abstract only)
JP 04-368676A	12/21/1992	Haruaki	Yes (abstract only)
JP 07-085621A	03/31/1995	Wakatsuki	Yes (abstract only)
JP 05-094682A	04/16/1993	Onishi, et al.	Yes (abstract only)
JP 06-020412A	01/28/1994	Takahisa	Yes (abstract only)

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	"Batch Transfer of Microstructures Using Flip-Chip Solder Bump Bonding" by Angah Signh et al.
	"Batch Micropacking By Compression-Bonding Wafer-Wafer Transfer" by Micheal M. Maharbiz et al.
	"Silicon Micromachined Electromagnetic Microactuators for Rigid Disk Drives" by Tang et al, <u>IEEE Transactions on Magnetics</u> , Vol. 31, No. 6, November 1995
	"Magnetic Recording Head Positioning at Very High Track Densities Using a Microactuator-Based, Two-Stage Servo System" by Fan et al., <u>IEEE Transactions on Industrial Electronics</u> , Vol. 42, No. 3, June 1995

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"A Flexural Piggyback Milli-Actuator for Over 5 Gbit/in² Density Magnetic Recording" by Koganezawa et al, IEEE Transactions on Magnetics, Vol. 32, No. 5, September 1996

"Transverse Mode Electrostatic Microactuator for MEMS-Based HDD Slider" by Imamura et al, IEEE 1996

"An Experiment for Head Positioning System Using Submicron Track-width GMR Head" by Yoshikawa et al., IEEE Transactions on Magnetics, Vol. 32, No. 5, September 1996

"Micro Electrostatic Actuators in Dual-Stage Disk Drives with High Track Density" by Tang et al., IEEE Transactions on Magnetics, Vol. 32, No. 5, September 1996

"Piezoelectric Microactuator Compensating for Off-Track Errors in Magnetic Disk Drives" by Imamura et al, Advance Information Storage Systems, Vol. 5, pp 119-126.

"A Dual-Stage Magnetic Disk Drive Actuator Using a Piezoelectric Device for a High Track Density" by Mori et al., IEEE Transactions on Magnetics, Vol. 27, No. 6, November 1991.

"Dynamic Loading Criteria for 3-1/2 Inch Inline HDD Using Multilayer Piezoelectric Load/Unload Mechanism" by Kajitani et al., IEEE Transactions on Magnetics, Vol. 27, No. 6, November 1991

"Design, Fabrication, and Testing of Silicon Microgimbals for Super-Compact Rigid Disk Drives" by Temesvary et al., Journal of Microelectromechanical Systems, Vol. 4, No. 1, March 1995

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